## PROCEEDINGS AT THE 907TH GENERAL MEETING

The 907th General Meeting of the Academy was held on Wednesday, March 12, 1997, at 1:00 p.m., Dr. Yoshio FUJITA, President, taking the chair. Eighty-eight members were present, and the following communications were made:

The offenses against Buddhist commandments . . . . . Akira HIRAKAWA, M. J. A.
Market and business organization. Three types of national economy . . . . . Keiichiro NAKAGAWA, M. J. A.
Water as the peculiar molecular-assebries . . . . . Syûzô SEKI, M. J. A.
Separate lanthanide tetrad effects in two seawater columns from the North West Pacific. A peculiarity of the fourth lanthanide tetrad under a certain condition . . . . . Akimasa MASUDA and Junji SHIMODA
Communicated by Kazuo YAMASAKI, M. J. A.
Convergence in the space of Fourier hyperfunctions . . . . . Stevan PILIPOVIĆ and Bogoljub STANKOVIĆ
The dynamics of nearly abelian polynomial semigroups at infinity . . . . . Tatsunori HARADA
Extensions of Hölder-McCarthy and Kantorovich inequalities and their applications . . . Takayuki FURUTA
Above three communicated by Kiyosi ITÔ, M. J. A.
Diffusivities of rare earth elements and Ba in magmatic silicate melts at high pressures . . . . . Eizo NAKAMURA and Ikuo KUSHIRO, M. J. A.
Accumulation of radioactivity in rat brain and peripheral tissues including salivary gland after intravenous administration of $^{14}$C-D-aspartic acid. . . . . Kazuhiro IMAI, Takeshi FUKUSHIMA, Tomofumi SANTA, Hiroshi HOMMA, Juko SUGIHARA, Hirohiko KODAMA, and Masayoshi YOSHIKAWA
Communicated by Masanori OTSUKA, M. J. A.
Experiments to locate sources of earthquake-related VLF electromagnetic signals . . . . . Yukio FUJINAWA, Kozo TAKAHASHI, Takumi MATSUMOTO, and Noriaki KAWAKAMI
Communicated by Yoshibumi TOMODA, M. J. A.
Construction of normal bases by special values of Hilbert modular functions . . . . . Keiichi KOMATSU
On the vanishing of Iwasawa invariants of certain $(p,p)$-extensions of Q . . . . . Gen YAMAMOTO
Above two communicated by Shokichi IYANAGA, M. J. A.

After a recess during which the members present met in their respective Sections, the General Meeting was resumed for business transactions.

First, the President announced that Dr. Melvin CALVIN, Honorary Member, had passed away on January 8, 1997 and Dr. Rizo TAKEUCHI, M. J. A., on March 2, 1997; the members rose from their seats in silence, expressing profound sense of grief.

Next, Dr. Matsuo ARA, M. J. A., and Dr. Ichiro KAWAMOTO, M. J. A., paid a tribute of admiration to the late Dr. Masao MORI's, and the late Dr. Akio TAKEUCHI's meritorious services to academic circles, respectively.

Then, the Chairmen of both Sections made reports of the matters dealt with at the respective Sectional Meetings.

After that, a decision was made of the recipients of Prizes for this year as follows:

Imperial Prize and Japan Academy Prize to:
Shigetada NAKANISHI for "Studies on Molecular Mechanisms of Neural Transmission"
Japan Academy Prizes to:
Mitsuhiko TAKUMI for *The World Great Crisis—The Process and Causes of the Crisis of 1929*
Taroh MATSUNO for "Investigation on Dynamics of the Mesosphere and the Stratosphere"
Hideo YAMATERA for "Invention of Yamatera Rule of Spectroscopy of Metal Complexes and Studies on their Coordination Structures"
Mutsuo SEKIGUCHI for "Repair of DNA Damage and Maintenance of Genetic Information"
Kiyoshi HORIKAWA for "Study on Nearshore Dynamics and Coastal Sediment Transport Mechanism"

Nobuaki KUMAGAI for "Fundamental Research on the Development of Electiomagnetic WaveTheory and it Applications to the Guided-Wave Transmission"

Koichiro TSUNEWAKI for "Comparative Gene and Plasmon Analyses in Wheat and its Related Genu Aegilops"

Shiro MIWA for "Studies on Hereditary Hemolytic Anemia due to Red Cell Enzymopathies"

The Meeting adjourned at 4:50 p.m.

日本学士院紀要

平成九年三月　第七十三巻A　第三号

平成九年四月四日　印刷
平成九年四月七日　発行

編集兼発行者　日本学士院
東京都台東区上野公園七の三十二

印刷所　株式会社東京プレス
東京都板橋区桜川二丁目二十七の十二

印刷者　依田義一
東京都板橋区桜川二丁目二十七の十二

Printed by
TOKYO PRESS COMPANY LIMITED
No. 27-12, Sakuragawa 2-chome, Itabashi-ku,
Tokyo 174 Japan
Tel.: (3932) 9291~4

MARCH, 1997

# PROCEEDINGS OF THE JAPAN ACADEMY

## SERIES A
## MATHEMATICAL SCIENCES

---

## CONTENTS

**Papers Communicated:—**


| | Page |
|---|---|
| S. PILIPOVIĆ and B. STANKOVIĆ: Convergence in the Space of Fourier Hyperfunctions | 33 |
| T. HARADA: The Dynamics of Nearly Abelian Polynomial Semigroups at Infinity | 36 |
| T. FURUTA: Extensions of Hölder-McCarthy and Kantorovich Inequalities and their Applications | 38 |
| K. KOMATSU: Construction of Normal Bases by Special Values of Hilbert Modular Functions | 42 |
| G. YAMAMOTO: On the Vanishing of Iwasawa Invariants of Certain $(p, p)$-extensions of $\mathbf{Q}$ | 45 |
| **Proceedings at the 907th General Meeting** | V |